

Since the noise reduction mechanism of the active panel system is based on the sound absorption in this way, occurrence of the failure situation of noise reduction due to acoustic cancellation mis-tuning and non-operation of the control system caused by severe transitional changes of the engine and/or response lag of the active system can be avoided. Also, engine fan noise of high intensity can be easily and inexpensively reduced by this single active panel system. In particular, reduction of low-frequency fan noise produced in fan engines of very high bypass ratio can be achieved.